

# Clopyralid and Compost

## *Information for Gardeners*

### What is clopyralid?

Clopyralid is a selective herbicide that is used in agriculture in Washington State. Until the Washington State Department of Agriculture (WSDA) banned lawn and turf use on March 1, 2002, it was also used by some lawn care companies. Use is still allowed in agriculture and on golf courses and the WSDA is considering allowing other turf uses. Clopyralid is used to control thistle, knapweed, dandelion and other broadleaf weeds.



### Why is clopyralid a problem in compost?

Unlike most other pesticides (herbicides, insecticides, etc.), clopyralid is very slow to break down during the composting process. It is also damaging to sensitive plants such as tomatoes, beans, peas, eggplant, parsley, potatoes, petunias, pansies, marigolds and sunflowers at very low concentrations (a few parts per billion). The most sensitive plants are primarily in the solanaceae, leguminosae, and compositae plant families. According to the EPA, it is not harmful to people or animals at these low levels (see EPA contact below for more information).

Clopyralid gets into compost when lawn clippings or straw that were treated with the herbicide are taken to compost facilities. Clopyralid is also found in the manure of animals fed hay or grains that were treated with clopyralid. Clopyralid contamination in compost has been a big problem for compost producers in Spokane and Pullman, and it also showed up in samples taken in fall 2001 from other compost facilities in Eastern and Western Washington.

### What herbicide products contain clopyralid?

“Confront” was the major lawn care product used by commercial applicators for residential lawns, commercial turf, and golf courses prior to the ban in Washington. “Millennium” is another clopyralid-containing product used on lawns. Clopyralid, sold under the trade names of Curtail, Redeem and Stinger, is also used for the spot control of thistles in agricultural fields and noxious weeds along roadways.

### What does clopyralid damage look like?

Symptoms on garden plants which might indicate clopyralid damage include lack of a central leader, cupping of leaves, failure of secondary leaves to grow, and leaves in legumes that are normally compound may stay single. See WSU’s website for pictures, at <http://css.wsu.edu/compost/compost.htm>

### What can I do to prevent clopyralid damage in my garden?

- Ask your compost supplier if they are testing for clopyralid. Many local compost producers (like Cedar Grove) now test each batch to make sure their compost does not have damaging levels of clopyralid.
- Be careful when you bring in outside materials like straw, hay or manure. These agricultural by-products could be contaminated. Ask your supplier for assurance that clopyralid was not used on the material, or on feed for animals if you are getting manure. If you are unsure you can do a bioassay (see below) or simply do not use the questionable materials around sensitive garden plants. Possible uses for clopyralid-contaminated compost or manure include spreading it on lawns or on soil around trees and woody ornamentals.



- If you are unsure of a material, do a “bioassay.” Bioassay simply means planting a sensitive seed like peas or beans, and watching for a few weeks to see if it develops normally. Call the Natural Lawn and Garden Hotline, (206) 633-0224 for information on how to do a bioassay, or for contact numbers for compost suppliers, or with any other questions.
- Clopyralid is not contained in home-use pesticides in Washington State, but don’t use any pesticide (like “weed and feed” or bug sprays) on material you plan to compost.
- Let Dow (clopyralid’s manufacturer) and the Washington State Department of Agriculture and EPA (who control it’s use) know about your concerns with clopyralid – see contacts below.

### **Does clopyralid pose a human health or environmental threat?**

The primary environmental threat from this herbicide is its effect on non-target plants. According to the EPA, the low levels found in compost are not harmful to human or animal health. The EPA will answer questions related to health. Please contact Karl Arne, Office of Ecosystems and Communities, EPA Region 10 (EC0-084), 1200 6th Ave, Seattle, WA 98101, Phone: 206 553-2576, FAX: 206 553-1775

### **Is compost still good for my garden? Yes!**

There have been few recorded instances of clopyralid damage in Western Washington, and following the guidelines above should help prevent problems. Compost is still the best thing you can do for your lawn, garden, or landscape.

- Compost builds healthy, biologically active soil, which provides plants with nutrients they need and protects them from many disease and pest problems. So you’ll have healthier, more vigorous plants that need less fertilizer and pesticides.
- Compost-enriched soil allows winter rains to soak in, slowing storm runoff that causes floods and damages salmon streams.
- Compost helps conserve water in the soil in summer, reducing irrigation needs by up to 50%.
- Using compost “closes the loop,” recycling yard “waste” into a valuable soil amendment to maintain the health of your soil.

Call the Hotline number below for free guides to Composting, Soil, and other lawn and garden topics, as well as current information on clopyralid.

**For more information, call the Natural Lawn and Garden Hotline at (206) 633-0224**

or e-mail [lawn&gardenhotline@seattletilth.org](mailto:lawn&gardenhotline@seattletilth.org)

More background information is available on Seattle Public Utilities’ website at

[www.cityofseattle.net/util/clopyralid](http://www.cityofseattle.net/util/clopyralid)

Or King County’s web site at [www.metrokc.gov/soils](http://www.metrokc.gov/soils)

### **Other useful contacts:**

WA State Department of Agriculture – Cliff Weed, WSDA Pesticide Management Division, PO Box 42589, Olympia, WA 98504 (360) 902-2040, fax (360) 902-2093 [cweed@agr.wa.gov](mailto:cweed@agr.wa.gov) or see <http://www.wa.gov/agr/clopyralid.htm>

USEPA WA Operations Office – Cindy Moore, 300 Desmond Dr. SE Suite 102, Lacey WA 98503 (360) 753-9469 [moore.cindy@epa.gov](mailto:moore.cindy@epa.gov)

USEPA Headquarters– Joanne Miller, Ariel Rios Building rm. 7505C, 1200 Pennsylvania Ave. NW, Washington DC 20460 (703) 305-6224 [miller.joanne@epa.gov](mailto:miller.joanne@epa.gov)

EPA Region 10, (for human and environmental health questions) Karl Arne, 1200 Sixth Avenue, Seattle WA 98101 (206) 553-2576 [arne.karl@epa.gov](mailto:arne.karl@epa.gov)

Dow AgroSciences – 1 (800) 255-3726 or Bryan Stuart, DOW AgroSciences Western States Governmental Relations at (916) 944-0278, or write direct to Dow CEO Michael Parker via the Grass Roots Recycling Network’s website at <http://www.grn.org/dow/index.html> or write Dow AgroSciences LLC, 9330 Zionsville Road, Indianapolis, IN 46268-1054